

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	David A. Wright et al.	Examiner:	Unknown
Serial No.:	Unknown	Group Art Unit:	Unknown
Filed:	Herewith	Docket:	900.175US2
Title:	PLANT RETROELEMENTS AND METHODS RELATED THERETO		

PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Before taking up the above-identified application for examination, please enter the following amendments.

IN THE SPECIFICATION

On page 1, please delete lines 7-8, and insert the following paragraph:

--This application is a divisional of U.S. Application No. 09/322,478, filed May 28, 1999, which claims priority to U.S. Provisional Patent Application Serial Number 60/087,125, filed May 29, 1998.--

IN THE CLAIMS

Cancel claims 1-48 without prejudice or disclaimer.

Please add claims 73-132:

--73. An isolated nucleic acid that encodes a plant retroviral primer binding site comprising SEQ ID NO:1 or SEQ ID NO:2.

74. An isolated nucleic acid that encodes at least a portion of a plant retroelement and that comprises a nucleic acid selected from the group consisting of:

- (a) a nucleic acid that is a plant retroelement primer binding site and that has at least 95% identity to SEQ ID NO:2, wherein said identity can be determined using the DNAsis computer program and default parameters;
- (b) a nucleic acid having SEQ ID NO:2; and
- (c) a nucleic acid complementary to SEQ ID NO:2.

AMENDMENT

Serial Number: Unknown

Page 2

Dkt: 900.175US2

Title: PLANT RETROELEMENTS AND METHODS RELATED THERETO

75. A vector that can transfer a nucleic acid to a plant cell comprising the isolated nucleic acid of claim 73 or 74.
76. A seed comprising the isolated nucleic acid of claim 73 or 74.
77. A plant comprising the isolated nucleic acid of claim 73 or 74.
78. The plant of claim 77, which plant is soybean; maize; sugar cane; beet; tobacco; wheat; barley; poppy; rape; sunflower; alfalfa; sorghum; rose; carnation; gerbera; carrot; tomato; lettuce; chicory; pepper; melon; cabbage; oat; rye; cotton; flax; potato; pine; walnut; citrus; hemp; oak; rice; petunia; orchids; Arabidopsis; broccoli; cauliflower; brussel sprouts; onion; garlic; leek; squash; pumpkin; celery; pea; bean; strawberries; grapes; apples; pears; peaches; banana; palm; cocoa; cucumber; pineapple; apricot; plum; sugar beet; lawn grasses; maple; triticale; safflower; peanut; or olive.
79. The plant of claim 77, which is soybean.
80. The isolated nucleic acid of claim 73 or 74, which further comprises gag, pol and env genes and which comprises adenine-thymidine-guanidine as the gag gene start codon.
81. The isolated nucleic acid of claim 73 or 74 that further comprises SEQ ID NO:4.
82. A plant cell comprising an isolated nucleic acid molecule of claim 81.
83. A seed comprising an isolated nucleic acid molecule of claim 81.
84. A vector that can transfer a nucleic acid to a plant cell comprising the isolated nucleic acid of claim 80.

85. The isolated nucleic acid of claim 73 or 74, wherein said nucleic acid encodes at least a portion of a plant envelope sequence and comprises a nucleic acid sequence selected from the group consisting of:

- (a) a nucleic acid sequence that has at least 50% identity to SEQ ID NO:5, wherein said identity can be determined using the DNAsis computer program and default parameters;
- (b) a nucleic acid sequence having SEQ ID NO:5;
- (c) a nucleic acid sequence that encodes an amino acid sequence that has at least 30% identity to SEQ ID NO:6, wherein said identity can be determined using the DNAsis computer program and default parameters;
- (d) a nucleic acid sequence that encodes amino acid sequence SEQ ID NO:6; and
- (e) a nucleic acid sequence fully complementary to a nucleic acid sequence selected from the group consisting of: a nucleic acid sequence of (a); a nucleic acid sequence of (b); a nucleic acid sequence of (c); and a nucleic acid sequence of (d).

86. A plant cell comprising an isolated nucleic acid molecule of claim 85.

87. A seed comprising an isolated nucleic acid molecule of claim 85.

88. A vector that can transfer a nucleic acid to a plant cell comprising the isolated nucleic acid of claim 85.

89. The isolated nucleic acid of claim 73 or 74, wherein said nucleic acid encodes at least a portion of a plant integrase sequence and comprises a nucleic acid sequence selected from the group consisting of:

- (a) a nucleic acid sequence that has at least 70% identity to SEQ ID NO:9, wherein said identity can be determined using the DNAsis computer program and default parameters;
- (b) a nucleic acid sequence having SEQ ID NO:9;
- (c) a nucleic acid sequence that encodes an amino acid sequence that has at least 75% identity to SEQ ID NO:10, wherein said identity can be determined using the DNAsis computer program and default parameters;

AMENDMENT

Serial Number: Unknown

Page 4

Dkt: 900.175US2

Title: PLANT RETROELEMENTS AND METHODS RELATED THERETO

(d) a nucleic acid sequence that encodes amino acid sequence SEQ ID NO:10; and

(e) a nucleic acid sequence fully complementary to a nucleic acid sequence selected from the group consisting of: a nucleic acid sequence of (a); a nucleic acid sequence of (b); a nucleic acid sequence of (c); a nucleic acid sequence of (d); and a nucleic acid sequence of (e).

90. A plant cell comprising an isolated nucleic acid molecule of claim 89.

91. A seed comprising an isolated nucleic acid molecule of claim 89.

92. A vector that can transfer a nucleic acid to a plant cell comprising the isolated nucleic acid of claim 89.

93. The isolated nucleic acid of claim 73 or 74, wherein said nucleic acid molecule encodes at least a portion of a plant reverse transcriptase sequence and comprises a nucleic acid sequence selected from the group consisting of:

(a) a nucleic acid sequence that has at least 70% identity to SEQ ID NO:11, wherein said identity can be determined using the DNAsis computer program and default parameters;

(b) a nucleic acid sequence having SEQ ID NO:11;

(c) a nucleic acid sequence that encodes an amino acid sequence that has at least 79% identity to SEQ ID NO:12, wherein said identity can be determined using the DNAsis computer program and default parameters;

(d) a nucleic acid sequence that encodes amino acid sequence SEQ ID NO:12; and

(e) a nucleic acid sequence fully complementary to a nucleic acid sequence selected from the group consisting of: a nucleic acid sequence of (a); a nucleic acid sequence of (b); a nucleic acid sequence of (c); a nucleic acid sequence of (d); and a nucleic acid sequence of (e).

94. A plant cell comprising an isolated nucleic acid molecule of claim 93.

95. A seed comprising an isolated nucleic acid molecule of claim 93.

96. A vector that can transfer a nucleic acid to a plant cell comprising the isolated nucleic acid of claim 93.
97. The isolated nucleic acid of claim 73 or 74, wherein said nucleic acid molecule encodes at least a portion of a plant RNaseH sequence and comprises a nucleic acid sequence selected from the group consisting of:
- (a) a nucleic acid sequence that has at least 70% identity to SEQ ID NO:15, wherein said identity can be determined using the DNAsis computer program and default parameters;
 - (b) a nucleic acid sequence having SEQ ID NO:15;
 - (c) a nucleic acid sequence that encodes an amino acid sequence that has at least 90% identity to SEQ ID NO:16, wherein said identity can be determined using the DNAsis computer program and default parameters;
 - (d) a nucleic acid sequence that encodes amino acid sequence SEQ ID NO:16; and
 - (e) a nucleic acid sequence fully complementary to a nucleic acid sequence selected from the group consisting of: a nucleic acid sequence of (a); a nucleic acid sequence of (b); a nucleic acid sequence of (c); a nucleic acid sequence of (d); and a nucleic acid sequence of (e).
98. A plant cell comprising an isolated nucleic acid molecule of claim 97.
99. A seed comprising an isolated nucleic acid molecule of claim 97.
100. A vector that can transfer a nucleic acid to a plant cell comprising the isolated nucleic acid of claim 97.
101. The isolated nucleic acid of claim 73 or 74, which further encodes at least one agronomically-significant characteristic selected from the group consisting of male sterility, self-incompatibility, foreign organism resistance, an improved biosynthetic pathway, environmental tolerance, a photosynthetic pathway, fruit ripening, oil biosynthesis, pigment biosynthesis, seed formation, starch metabolism, salt tolerance, cold/frost tolerance, drought tolerance, and tolerance to anaerobic conditions.

AMENDMENT

Serial Number: Unknown

Title: PLANT RETROELEMENTS AND METHODS RELATED THERETO

Page 6

Dkt: 900.175US2

102. A method to impart agronomically significant characteristics to a plant, comprising contacting the nucleic acid of claim 101 with at least one plant cell under conditions sufficient to allow said nucleic acid to enter said cell.
103. An isolated nucleic acid that encodes a plant retroviral polypurine tract and that comprises SEQ ID NO:3, or a nucleic acid sequence fully complementary to SEQ ID NO:3.
104. A vector that can transfer a nucleic acid to a plant cell comprising the isolated nucleic acid of claim 103.
105. A seed comprising the isolated nucleic acid of claim 103.
106. A plant comprising the isolated nucleic acid of claim 103.
107. The plant of claim 106, which plant is soybean; maize; sugar cane; beet; tobacco; wheat; barley; poppy; rape; sunflower; alfalfa; sorghum; rose; carnation; gerbera; carrot; tomato; lettuce; chicory; pepper; melon; cabbage; oat; rye; cotton; flax; potato; pine; walnut; citrus; hemp; oak; rice; petunia; orchids; Arabidopsis; broccoli; cauliflower; brussel sprouts; onion; garlic; leek; squash; pumpkin; celery; pea; bean; strawberries; grapes; apples; pears; peaches; banana; palm; cocoa; cucumber; pineapple; apricot; plum; sugar beet; lawn grasses; maple; triticale; safflower; peanut; or olive.
108. The plant of claim 106, which is soybean.
109. The isolated nucleic acid of claim 103, which further comprises gag, pol and env genes and which comprises adenine-thymidine-guanidine as the gag gene start codon.
110. The isolated nucleic acid of claim 103, which further comprises SEQ ID NO:4.

AMENDMENT

Serial Number: Unknown

Title: PLANT RETROELEMENTS AND METHODS RELATED THERETO

Page 7

Dkt: 900.175US2

111. A plant cell comprising an isolated nucleic acid molecule of claim 110.
112. A seed comprising an isolated nucleic acid molecule of claim 110.
113. A vector that can transfer a nucleic acid to a plant cell comprising the isolated nucleic acid of claim 110.
114. The isolated nucleic acid of claim 103, wherein said nucleic acid encodes at least a portion of a plant envelope sequence and comprises a nucleic acid sequence selected from the group consisting of:
- (a) a nucleic acid sequence that has at least 50% identity to SEQ ID NO:5, wherein said identity can be determined using the DNAsis computer program and default parameters;
 - (b) a nucleic acid sequence having SEQ ID NO:5;
 - (c) a nucleic acid sequence that encodes an amino acid sequence that has at least 30% identity to SEQ ID NO:6, wherein said identity can be determined using the DNAsis computer program and default parameters;
 - (d) a nucleic acid sequence that encodes amino acid sequence SEQ ID NO:6; and
 - (e) a nucleic acid sequence fully complementary to a nucleic acid sequence selected from the group consisting of: a nucleic acid sequence of (a); a nucleic acid sequence of (b); a nucleic acid sequence of (c); a nucleic acid sequence of (d); and a nucleic acid sequence of (e).
115. A plant cell comprising an isolated nucleic acid molecule of claim 114.
116. A seed comprising an isolated nucleic acid molecule of claim 114.
117. A vector that can transfer a nucleic acid to a plant cell comprising the isolated nucleic acid of claim 114.

118. The isolated nucleic acid of claim 103, wherein said nucleic acid encodes at least a portion of a plant integrase sequence and comprises a nucleic acid sequence selected from the group consisting of:

- (a) a nucleic acid sequence that has at least 70% identity to SEQ ID NO:9, wherein said identity can be determined using the DNAsis computer program and default parameters;
- (b) a nucleic acid sequence having SEQ ID NO:9;
- (c) a nucleic acid sequence that encodes an amino acid sequence that has at least 75% identity to SEQ ID NO:10, wherein said identity can be determined using the DNAsis computer program and default parameters;
- (d) a nucleic acid sequence that encodes amino acid sequence SEQ ID NO:10; and
- (e) a nucleic acid sequence fully complementary to a nucleic acid sequence selected from the group consisting of: a nucleic acid sequence of (a); a nucleic acid sequence of (b); a nucleic acid sequence of (c); a nucleic acid sequence of (d); and a nucleic acid sequence of (e).

119. A plant cell comprising an isolated nucleic acid molecule of claim 118.

120. A seed comprising an isolated nucleic acid molecule of claim 118.

121. A vector that can transfer a nucleic acid to a plant cell comprising the isolated nucleic acid of claim 118.

122. The isolated nucleic acid of claim 103, wherein said nucleic acid molecule encodes at least a portion of a plant reverse transcriptase sequence and comprises a nucleic acid sequence selected from the group consisting of:

- (a) a nucleic acid sequence that has at least 70% identity to SEQ ID NO:11, wherein said identity can be determined using the DNAsis computer program and default parameters;
- (b) a nucleic acid sequence having SEQ ID NO:11;
- (c) a nucleic acid sequence that encodes an amino acid sequence that has at least 79% identity to SEQ ID NO:12, wherein said identity can be determined using the DNAsis computer program and default parameters;

AMENDMENT

Serial Number: Unknown

Page 9
Dkt: 900.175US2

Title: PLANT RETROELEMENTS AND METHODS RELATED THERETO

- (d) a nucleic acid sequence that encodes amino acid sequence SEQ ID NO:12; and
- (e) a nucleic acid sequence fully complementary to a nucleic acid sequence selected from the group consisting of: a nucleic acid sequence of (a); a nucleic acid sequence of (b); a nucleic acid sequence of (c); a nucleic acid sequence of (d); and a nucleic acid sequence of (e).

123. A plant cell comprising an isolated nucleic acid molecule of claim 122.

124. A seed comprising an isolated nucleic acid molecule of claim 122.

125. A vector that can transfer a nucleic acid to a plant cell comprising the isolated nucleic acid of claim 122.

126. The isolated nucleic acid of claim 103, wherein said nucleic acid molecule encodes at least a portion of a plant RNaseH sequence and comprises a nucleic acid sequence selected from the group consisting of:

- (a) a nucleic acid sequence that has at least 70% identity to SEQ ID NO:15, wherein said identity can be determined using the DNAsis computer program and default parameters;
- (b) a nucleic acid sequence having SEQ ID NO:15;
- (c) a nucleic acid sequence that encodes an amino acid sequence that has at least 90% identity to SEQ ID NO:16, wherein said identity can be determined using the DNAsis computer program and default parameters;
- (d) a nucleic acid sequence that encodes amino acid sequence SEQ ID NO:16; and
- (e) a nucleic acid sequence fully complementary to a nucleic acid sequence selected from the group consisting of: a nucleic acid sequence of (a); a nucleic acid sequence of (b); a nucleic acid sequence of (c); a nucleic acid sequence of (d); and a nucleic acid sequence of (e).

127. A plant cell comprising an isolated nucleic acid molecule of claim 126.

128. A seed comprising an isolated nucleic acid molecule of claim 126.

AMENDMENT

Serial Number: Unknown

Page 10
Dkt: 900.175US2Title: PLANT RETROELEMENTS AND METHODS RELATED THERETO

129. A vector that can transfer a nucleic acid to a plant cell comprising the isolated nucleic acid of claim 126.

130. The isolated nucleic acid of claim 103, that further encodes at least one agronomically-significant characteristic selected from the group consisting of male sterility, self-incompatibility, foreign organism resistance, an improved biosynthetic pathway, environmental tolerance, a photosynthetic pathway, fruit ripening, oil biosynthesis, pigment biosynthesis, seed formation, starch metabolism, salt tolerance, cold/frost tolerance, drought tolerance, and tolerance to anaerobic conditions.

131. A method to impart agronomically significant characteristics to a plant, comprising contacting the nucleic acid of claim 120 with at least one plant cell under conditions sufficient to allow said nucleic acid to enter said cell.

132. A method to transfer nucleic acid into a plant cell, comprising contacting the nucleic acid of claim 73, 74 or 103 with at least one plant cell under conditions sufficient to allow said nucleic acid to enter said cell.--

REMARKS

Claims 73-132 are now pending in this application. Support for the subject matter of these claims can be found throughout the specification and in the original claims, for example, in the passages indicated below:

Claim 73: Specification at Page 19, Lines 28-29; and Page 41, Lines 5-30.

Claim 74: Specification at Page 11, Line 14 to Page 12, Line 13; and original claims 1 and 22.

Claim 75: Specification at Page 26, Line 26 to Page 28, Line 22.

Claim 76: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.

Claim 77: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 28-30.

AMENDMENT

Serial Number: Unknown

Page 11

Dkt: 900.175US2

Title: PLANT RETROELEMENTS AND METHODS RELATED THERETO

- Claim 78: Specification at Page 12, Line 27 to Page 13, Line 2; Page 14, Lines 19-29; Page 29, Lines 23-36; Page 35, Lines 25-35; original claim 29.
- Claim 79: Specification at Page 13, Lines 1-2; Page 14, Lines 28-29; Page 29, Lines 33-34; Page 35, Lines 34-35; original claim 30.
- Claim 80: Specification at Page 7, Lines 8-12; Page 23, Line 35 to Page 24, Line 4; original claim 4.
- Claim 81: Specification at Page 7, Lines 8-12; Page 24, Lines 2-4; original claims 1 and 5.
- Claim 82: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 28-30.
- Claim 83: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 84: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 85: Specification at Page 4, Lines 23-26; Page 7, Line 15 to Page 8; original claims 1 and 6.
- Claim 86: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 28-30.
- Claim 87: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 88: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 89: Specification at Page 4, Lines 33-36; Page 5, Line 35 to Page 6, Line 2; Page 8, Line 14 to Page 9, Line 4; original claims 1 and 10.
- Claim 90: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 28-30.
- Claim 91: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 92: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 93: Specification at Page 5, Lines 1-4; Page 6, Lines 4-7; Page 9, Line 14 to Page 10, Line 4; original claims 1 and 14.

AMENDMENT

Serial Number: Unknown

Page 12

Dkt: 900.175US2

Title: PLANT RETROELEMENTS AND METHODS RELATED THERETO

- Claim 94: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 28-30.
- Claim 95: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 96: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 97: Specification at Page 5, Lines 11-14; Page 6, Lines 14-17; Page 10, Line 15 to Page 11, Line 4; original claims 1 and 18.
- Claim 98: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 19, 28-30.
- Claim 99: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 100: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 101: Specification at Page 12, Lines 15-25; Page 13, Lines 9-25; Page 14, Lines 7-17; original claims 24 and 25.
- Claim 102: Specification at Page 8, Lines 6-12; Page 9, Lines 6-12; Page 10, Lines 6-13; Page 28, Line 24 to Page 30, Line 17; original claims 9, 13, 17, 21, 32, 43 and 44.
- Claim 103: Specification at Page 19, Line 30; Page 41, Lines 5-30.
- Claim 104: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 105: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 106: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 28-30.
- Claim 107: Specification at Page 12, Line 27 to Page 13, Line 2; Page 14, Lines 19-29; Page 29, Lines 23-36; Page 35, Lines 25-35; original claim 29.
- Claim 108: Specification at Page 13, Lines 1-2; Page 14, Lines 28-29; Page 29, Lines 33-34; Page 35, Lines 34-35; original claim 30.
- Claim 109: Specification at Page 7, Lines 8-12; Page 23, Line 35 to Page 24, Line 4; original claim 4.

AMENDMENT

Serial Number: Unknown

Page 13

Dkt: 900.175US2

Title: PLANT RETROELEMENTS AND METHODS RELATED THERETO

- Claim 110: Specification at Page 7, Lines 8-12; Page 24, Lines 2-4; original claims 1 and 5.
- Claim 111: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 28-30.
- Claim 112: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 113: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 114: Specification at Page 4, Lines 23-26; Page 7, Line 15 to Page 8; original claims 1 and 6.
- Claim 115: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 28-30.
- Claim 116: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 117: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 118: Specification at Page 4, Lines 33-36; Page 5, Line 35 to Page 6, Line 2; Page 8, Line 14 to Page 9, Line 4; original claims 1 and 10.
- Claim 119: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 28-30.
- Claim 120: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 121: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 122: Specification at Page 5, Lines 1-4; Page 6, Lines 4-7; Page 9, Line 14 to Page 10, Line 4; original claims 1 and 14.
- Claim 123: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 28-30.
- Claim 124: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 125: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 126: Specification at Page 5, Lines 11-14; Page 6, Lines 14-17; Page 10, Line 15 to Page 11, Line 4; original claims 1 and 18.

AMENDMENT

Serial Number: Unknown

Title: PLANT RETROELEMENTS AND METHODS RELATED THERETO

Page 14

Dkt: 900.175US2

- Claim 127: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 3, 19, 28-30.
- Claim 128: Specification at Page 7, Line 7; Page 23, Line 35; Page 35, Line 25; original claims 2 and 27.
- Claim 129: Specification at Page 26, Line 26 to Page 28, Line 22.
- Claim 130: Specification at Page 12, Lines 15-25; Page 13, Lines 9-25; Page 14, Lines 7-17; original claims 24 and 25.
- Claim 131: Specification at Page 8, Lines 6-12; Page 9, Lines 6-12; Page 10, Lines 6-13; Page 28, Line 24 to Page 30, Line 17; original claims 9, 13, 17, 21, 32, 43 and 44.
- Claim 132: Specification at Page 13, Lines 9-12; Page 14, Lines 31-33; Page 29, Lines 8-17; Page 36, Lines 6-9.

To conform the above-referenced application to the requirements of 37 C.F.R. §§ 1.821 through 1.825, a paper copy of a Sequence Listing is submitted herewith. The paper copy of the Sequence Listing in this application is identical to the computer readable form of the Sequence Listing filed in application Serial No. 09/322,478, filed May 28, 1999. In accordance with 37 C.F.R. § 1.821(e), please use the computer readable form filed on May 28, 1999 in application Serial No. 09/322,478 as the computer readable form for the instant application.

It is respectfully submitted that the pending claims are in condition for allowance, which action is earnestly solicited. The Examiner is invited to contact the below-signed attorney with any questions regarding the present application.

Please charge any addition fees due, or credit any overpayment to PTO Deposit Account No. 19-0743.

AMENDMENT

Serial Number: Unknown

Title: PLANT RETROBLEMENTS AND METHODS RELATED THERETO

Page 15
Dkt: 900.175US2

Respectfully submitted,

DAVID A. WRIGHT ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(516) 795-6820

Date

Sep. 27, 2001

By

Robin A. Chadwick

Robin A. Chadwick
Reg. No. 36,477

"Express Mail" mailing label number: EL873859675US

Date of Deposit: September 27, 2001

This paper or fee is being deposited on the date indicated above with the United States Postal Service pursuant to 37 CFR 1.10, and is addressed to the Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.